

National Security Division opens new cyber center to protect national infrastructures

By Ethan Huffman



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for employees of the INEEL

After months of preparation, the INEEL and the Critical Infrastructure Assurance organization officially opened operation of their new Control System Security and Test Center (CSSTC) on Aug. 19.

The CSSTC creates a centralized location for employees of utility companies, manufacturers, and the federal departments of Energy and Homeland Security to solve issues and potential threats associated with cyber attacks on the nation's critical infrastructures. These infrastructures include electric power grids, chemical and manufacturing plants, oil and gas and telecommunications.



Chris Morgan photo

Associate Lab Director Laurin Dodd, left, and Lab Director Paul Kearns, right, celebrate the official opening of the INEEL's new Control System Security and Test Center (CSSTC) during a ribbon-cutting ceremony Aug. 19 with Hank Kenchington from the DOE's Office of Energy Assurance and Dave Sanders from the Department of Homeland Security.

Much of the nation's critical infrastructures are linked to computer aided systems, making cyber attacks by hackers, virus writers and adversaries a real threat to our daily lives. With those prominent concerns, the U.S. Department of Homeland Security selected the INEEL and its National Security Division as the DOE's lead lab for vulnerability reduction.

Just over a year ago this month, many northeastern metropolitan cities were in the midst of a historic blackout. The event left millions of American and Canadian citizens without power for upwards of four days. It cost the U.S. economy between \$4 billion and \$10 billion in lost wages, productivity and overtime. The event, although not terrorism-related, brought infrastructure vulnerabilities to the forefront of homeland security. It proved that basic necessities needed for daily activity in our nation could be an easy target for cyber terrorists.

In order to protect against cyber attacks on the nation's infrastructures, the CSSTC will leverage existing test bed capabilities from the INEEL. The center also utilizes test beds from other DOE labs. These test beds simulate various utility systems and encompass working models of an electrical power grid, or telecommunication system, for example. Utility companies and manufacturers use the CSSTC and associated test beds to perform real-world cyber attacks in a controlled setting. This allows them to search for inherent vulnerabilities and work toward a solution.

Currently, the center – located in the former supercomputing building at 1155 Foote Drive in Idaho Falls – has working relationships established with over 30 utility companies, equipment manufacturers and government organizations.



**Paul Kearns,
INEEL Lab
director, talks
about the bright
future of research
at the ceremony
for the new
Control System
Security and Test
Center.**

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